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|   |                   |                      |                         | •                |  |
|---|-------------------|----------------------|-------------------------|------------------|--|
| APPLICATION NO.   | FILING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
| 09/868,664  | 09/26/2001        | Stewart Mark Nichols | 05222.00161             | 3001             |  |
| 29638 7   | 7590 10/25/2006   |                      | EXAMINER                |                  |  |
| BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NO. 005222 10 S. WACKER DRIVE, 30TH FLOOR |                   |                      | COUGHLAN, PETER D       |                  |  |
|   |                   |                      | ART UNIT                | PAPER NUMBER     |  |
| CHICAGO, II   | CHICAGO, IL 60606 |                      | 2129                    |                  |  |
|   |                   |                      | DATE MAILED: 10/25/2006 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.  | Applicant(s)  |    |  |  |  |
|--|---|--|---|----|--|--|--|
| Office Action Comments   |   | 09/868,664   | NICHOLS, STEWART MAR  | RK |  |  |  |
|  | Office Action Summary   | Examiner   | Art Unit  |    |  |  |  |
|  |   | Peter Coughlan   | 2129  |    |  |  |  |
| Period fo  | The MAILING DATE of this communicat<br>or Reply   | on appears on the cover sheet v  | vith the correspondence address   |    |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any  | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL assions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply is specified above, the maximum statutor re to reply within the set or extended period for reply will, be reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b). | ING DATE OF THIS COMMUN<br>CFR 1.136(a). In no event, however, may a<br>stion.<br>by period will apply and will expire SIX (6) MO<br>by statute, cause the application to become A | ICATION. I reply be timely filed INTHS from the mailing date of this communication IBANDONED (35 U.S.C. § 133). |    |  |  |  |
| Status   |   |  |   |    |  |  |  |
| 1)⊠  | Responsive to communication(s) filed or   | n 31 August 2006   |   |    |  |  |  |
| ·  |   | ☐ This action is non-final.  |   |    |  |  |  |
| 3)   | Since this application is in condition for  |  | tters, prosecution as to the merits is  | s  |  |  |  |
| -,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |  |   |    |  |  |  |
| Dienoeiti  | on of Claims  |  | ·   |    |  |  |  |
|  |   |  |   |    |  |  |  |
| ,  | Claim(s) <u>1-21</u> is/are pending in the appli  |  |   |    |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |   |    |  |  |  |
| •  | 5) Claim(s) is/are allowed.   |  |   |    |  |  |  |
|  | Claim(s) <u>1-21</u> is/are rejected.   |  |   |    |  |  |  |
| /  | ) Claim(s) is/are objected to. ) Claim(s) are subject to restriction and/or election requirement.   |  |   |    |  |  |  |
| 8)[  | claim(s) are subject to restriction   | and/or election requirement.   |   |    |  |  |  |
| Applicati  | on Papers   |  |   |    |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |  |   |    |  |  |  |
| 10)⊠ The drawing(s) filed on 6/20/2001 is/are: a)⊠ accepted or b)□ objected to by the Examiner.                              |   |  |   |    |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |   |    |  |  |  |
|  | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |   |    |  |  |  |
| 11)  | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |   |    |  |  |  |
| Priority (   | ınder 35 U.S.C. § 119   |  |   |    |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: |   |  |   |    |  |  |  |
|  | 1. Certified copies of the priority doc   |  |   |    |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No  |  |   |    |  |  |  |
|  | 3. Copies of the certified copies of the  |  | n received in this National Stage   |    |  |  |  |
|  | application from the International Bureau (PCT Rule 17.2(a)).   |  |   |    |  |  |  |
| * 5  | See the attached detailed Office action fo  | r a list of the certified copies no  | t received.   |    |  |  |  |
|  |   |  |   |    |  |  |  |
| 044  | W-1   |  |   |    |  |  |  |
| Attachment   | t(s)<br>e of References Cited (PTO-892)   | Λ □ 1_1  | Summer (DTO 442)  |    |  |  |  |
|  | e of Caftsperson's Patent Drawing Review (PTO-9   |  | Summary (PTO-413)<br>(s)/Mail Date  |    |  |  |  |
| 3) 🔲 Inforr  | nation Disclosure Statement(s) (PTO/SB/08)  | 5) Notice of   | Informal Patent Application   |    |  |  |  |
| Pape   | r No(s)/Mail Date   | 6)   | ·   |    |  |  |  |

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## **Detailed Action**

1. This office action is in response to an AMENDMENT entered August 31, 2006 for the patent application 09/868664 filed on June 20, 2001.

2. The previous Office Action of May 31, 2006 is fully incorporated into this Office Action by reference.

#### Status of Claims

3. Claims 1-21 are pending.

### 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-21 are rejected under 35 U.S.C. 101 for nonstatutory subject matter.

The computer system must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77. The invention is ineligible because it has not been limited to a substantial practical

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application. The phrase 'creating a presentation' is too broad and falls outside of a real world application and is considered abstract. The result has to be a practical application. Please see the interim guidelines for examination of patent applications for

patent subject matter eligibility published November 22, 2005 in the official gazette.

In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the <u>final result</u> achieved by the claimed invention is "useful, tangible and concrete." If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. The claims do not teach a real world application. If the claims are to be used for the instruction of children, automotive repair or or running a political campaign then none have been stated.

The invention must be for a practical application and either:

- 1) specify transforming (physical thing) or
- 2) have the FINAL RESULT (not the steps) achieve or produce a useful (specific, substantial, AND credible), concrete (substantially repeatable/ non-unpredictable), AND tangible (real world/ non-abstract) result.

A claim that is so broad that it reads on both statutory and non-statutory subject matter, must be amended, and if the specification discloses a practical application but

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the claim is broader than the disclosure such that it does not require the practical application, then the claim must be amended.

Claims that recites a computer method for the generation of a 'presentation' is an exercise only and lacks a tangible, functional, real world result are not statutory.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 10, 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims contain the phrase 'simulation domain' which is not mentioned at all in the specification. The claims and/or the specification must be amended to correct this rejection.

Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The statement 'providing subsequent feedback to the student, based on the other profile' is not mentioned in the specification. The claims and/or the specification must be amended to correct this rejection.

Claims 1-21 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a tutorial system, does not reasonably provide enablement for 'creating a presentation'. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification is directed for a learning/tutorial system but the claims are much broader and thus there exists a scope of enablement rejection. The claims and/or the specification must be amended to correct this rejection.

Claims 1, 10, 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims make the statement that providing feedback with provide further motivation for accomplishing the tasks. There exists no grounds or basis for this assumption. 'Motivation' is an intangible quality which is not directly linked to feedback. The claims and/or the specification must be amended to correct this rejection.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This claim states that 'logic' is used for numerous purposes but applicant fails to claim what type of logic is being implemented. Is it Boolean logic, predicate calculus logic, modern algebra logic (rings and sets etc.), quantum logic? The Examiner does not know what type of logic is being used. The claims and/or the specification must be amended to correct this rejection.

Claims 5, 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims have the term 'source code' in them but said term is lacking within the specification. 'Source code' could have a number of meanings and manifestations but it is not within the specification for clarification or description. The claims and/or the specification must be amended to correct this rejection.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) (hereinafter referred to as Corder) being anticipated by August, U.S. 5302132.

Claims 1, 10, 19

Corder anticipates a processor that runs a computer program to create the presentation (Corder, C12:13-26); a memory that stores information under control of the processor (Corder, C13:42-50) matching a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task (Corder, C8:21-38; 'Profile', 'simulation domain', 'set or criteria' and 'desired aspect' of applicant is equivalent to 'input', 'the system', 'decision rules' and 'determining students needs' of Corder.); presenting information indicative of a goal (Corder, C5:28-53; The word 'superintendent' is broken down into syllabification so the student can learn each part through a speaker resulting in the student learning the word..): integrating information that motivates accomplishment of the goal (Corder, C7:35-44; 'Integrating information' and 'accomplishment of the goal' of applicant is equivalent to 'immediate feedback' and 'how to take notes' of Corder.); monitoring progress toward the goal determining at least one profile that is true for the current

simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (**Corder**, C7:35-44; 'True' of applicant is equivalent to 'completeness' of Corder. Corder illustrates feedback in this passage as well.), the at least one profile, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (**Corder**, C4:15-35; 'Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One 'assessment' is for lip reading and another is for signing.); and displaying details of the computer-implemented method and displaying the presentation as the presentation executes, wherein the presentation provides a cognitive educational experience. (**Corder**, C6:27-37; 'Displaying details' of applicant is equivalent to 'sequence of stimuli' of Corder.)

#### Claims 2, 11

Corder anticipates instantiating a particular feedback model based on characteristics of a target user. (**Corder,** C3:31 through C4:6; 'Target user' of applicant is based on 'preliminarily evaluation' of Corder.)

#### Claims 3, 12

Corder anticipates receiving and analyzing user responses using an expert system to determine details of the computer-implemented method to display. (Corder, C3:31 through C4:6; Corder illustrates this in the passage '... the means for generating test stimuli and receiving the responses of the student to the stimulus...')

Claims 4, 13

Corder anticipates browsing details of an object as the presentation executes.

(Corder, C6:67 through C7:34; 'Details of an object' of applicant is equivalent to 'diverse subject matter' of Corder.)

Claims 5, 14

Corder anticipates displaying source code of the presentation as the presentation executes. (**Corder**, C517-27; 'Displaying source code' of applicant is equivalent to the results of the 'display' of Corder.)

Claims 6, 15

Corder anticipates modifying the presentation based on a user indicia as the presentation executes. (**Corder**, C16:49-56; 'Modifying' and 'user indicia' of applicant are equivalent to 'delete or modify' and 'identifiable characteristics' of Corder.)

Claims 7, 16

Corder anticipates capturing portions of the presentation in response to a user indicia as the presentation executes. (**Corder,** C6:14-20; 'Capturing portions' of applicant is equivalent to 'evaluation of the student response' of Corder.)

Claims 8, 17

Corder anticipates tailoring feedback based on a user indicia Is the presentation executes. (**Corder**, C6:14-20; 'Tailoring feedback' of applicant is equivalent to 'formation of recommendations' of Corder.)

Claims 9, 18

Corder anticipates presenting a tailored simulation based on 1 user indicia as the presentation executes. (**Corder**, C6:1-20; 'Presenting' of applicant is equivalent to 'delivery of the instructions' of Corder.)

Claim 20

Corder anticipates (d)(i) identifying a subset of the simulation domain from at least one characteristic of the profile (**Corder**, C9:3-13; A subset of the profile of applicant is equivalent to 'touch screen, graphic table or pen & paper' of Corder.); and (d)(ii) determining the feedback in accordance with the subset of the simulation domain. (**Corder**, C6:27-37; 'Feedback' of applicant is equivalent to 'lessons' of Corder.)

Claim 21

Corder anticipates creating another profile that reuses at least one of the plurality of characteristics (**Corder**, C2:24-31; 'Creating another profile that reuses' of applicant is demonstrated in the following. The fact that there are 'students' implies more that one user has access to Corder. 'Profile' of applicant is equivalent to 'different cognitive learning styles' of Corder.); and providing subsequent feedback to the student, based

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on the other profile. (**Corder,** C6:14-20: 'Other profile' of applicant is equivalent to 'learning style capabilities and disabilities' of Corder.)

#### Response to Arguments

- 5. Applicant's arguments filed on August 31, 2006 for claims 1-21 have been fully considered but are not persuasive.
- 6. In reference to the Applicant's argument:

Claims 1-21 are pending with this paper. Claims 1-20 are rejected by this Office Action. Applicant is amending claims 1, 10, 19, and 20 and adding claim 21.

Applicant acknowledges the withdrawal of the objection to claim 20. Applicant notes that the Office Action cites new prior art (Corder). Furthermore, the Office Action does not provide further arguments regarding the amended claims and the previously cited prior art of Amado, Tatsuoka, Foster, and Bogle.

Claim Rejections – 35 U.S.C. §102

Claims 1-20 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,302,132 (Corder).

Regarding claim 1, Applicant is amending the claim to include the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." (Emphasis added.) The amendment is support by the present patent application as originally filed, e.g., (Page 9, line 17 – page 10, line 6; Figure 5). The specification discloses (Page 32, line 17 – page 10, line 6. Emphasis added.):

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A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between \$75,000 and \$110,000. A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands. Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

The Office Action alleges that Corder teaches (Page 3, section 4):

... monitoring progress toward the goal determining at least one profile that is true, for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (Corder, C7:35-44; `True' of applicant is equivalent to `completeness' of Corder. Corder illustrates feedback in this passage as well.)

Corder does disclose (Column 7, lines 35-44):

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The method provides immediate feedback on the correct response expect. For example, if the instructional objective is to teach the student how to take notes during a lecture on the benefits to the general public of the space station program, the student's typed "notes" are analyzed by the system and feedback is provided to the student in several forms. One such form is a recommended set of notes for the lecture. Another is an analysis of the notes made by the student with respect to their completeness and relevance to the topic.

Corder does not even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." (Emphasis added.) Corder merely discloses a single objective for teaching "the student how to take notes during a lecture on the benefits to the general public of the space station program." Similarly, Corder further discloses selecting a target instructional objective from a plurality of hierarchically ranked objectives. (Column 3, lines 42-49.)

### Examiner's response:

If Corder can provide 'immediate feedback' then it is doing so by performing 'monitoring progress toward the goal' of applicant. 'Profile' of applicant is equivalent to 'input' of Corder. If 'input' is 'true' of applicant then Corder is determining 'at least profile that is true' due to the fact Corder can provide immediate feedback. Corder teaches at least one profile, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (Corder, C4:15-35; 'Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One 'assessment' is for lip reading and another is for signing.) An example of 'identifying a subset of the simulation domain' would be the categories of 'lip reading' and 'signing' of Corder. (Corder, C8:21-38; 'Profile', 'simulation domain', 'set or criteria' and 'desired aspect' of applicant is equivalent to 'input', 'the system', 'decision rules' and 'determining students needs' of

Corder.), (**Corder,** C5:28-53; The word 'superintendent' is broken down into syllabification so the student can learn each part through a speaker resulting in the student learning the word..), (**Corder,** C7:35-44; 'Integrating information' and 'accomplishment of the goal' of applicant is equivalent to 'immediate feedback' and 'how to take notes' of Corder.), (**Corder,** C7:35-44; 'True' of applicant is equivalent to 'completeness' of Corder. Corder illustrates feedback in this passage as well.), (**Corder,** C4:15-35; 'Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One 'assessment' is for lip reading and another is for signing.), (**Corder,** C6:27-37; 'Displaying details' of applicant is equivalent to 'sequence of stimuli' of Corder.)

## 7. In reference to the Applicant's argument:

Applicant is amending claim 10 to include the similar feature of "logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Applicant is also amending claim 19 to include the feature of "monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student. based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." Claims 10 and 19 are patentable for at least the above reasons. Claims 2-9, 11-18, and 20 ultimately depend from independent claims 1, 10, and 19, respectively, and are patentable for at least the above reasons. Moreover, claim 5 includes the feature of "including displaying source code of the presentation as the presentation executes." (Emphasis added.) The Office Action alleges that (Page 4, section 4. Emphasis added.):

Corder anticipates displaying source code of the presentatior [presentator] as the presentation executes. (Corder, CS 17-27; `Displaying source code' of applicant is equivalent to the results of the `display' of Corder.)

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However, Corder merely teaches displaying content (e.g., phonograms, icons, or buttons) that results from the source code and fails to even suggest displaying the source code itself. Similarly, claim 14 includes the feature of "including logic that displays source code of the presentation as the presentation executes." Applicant requests reconsideration of claims 1-20.

Applicant is adding claim 21, which depends from claim 1 and is supported by the specification as originally filed, e.g., page 9, line 32 – page 10, line 6. All objections and rejections have been addressed. Hence, it is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

#### Examiner's response:

The type of 'logic' is not defined within the specification. 'Source code' is not defined within the specification. So, 'Displaying source code' of applicant is equivalent to the results of the 'display' of Corder.

#### Examination Considerations

8. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has the full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the

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art. Such an approach is broad in concept and can be either explicit or implicit in

meaning.

9. Examiner's Notes are provided to assist the applicant to better understand the

nature of the prior art, application of such prior art and, as appropriate, to further

indicate other prior art that maybe applied in other office actions. Such comments are

entirely consistent with the intent and sprit of compact prosecution. However, and

unless otherwise stated, the Examiner's Notes are not prior art but link to prior art that

one of ordinary skill in the art would find inherently appropriate.

10. Examiner's Opinion: Paragraphs 8 and 9 apply. The Examiner has full latitude

to interpret each claim in the broadest reasonable sense.

#### Conclusion

The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

-U. S. Patent 5727950: Cook

-U. S. Patent 5649136: Shen

-U. S. Patent 5344326: Ferris

-U. S. Patent 5835902: Jannarone

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-U. S. Patent 5809490: Guiver

-U. S. Patent 5781191: Mayuzumi

-U. S. Patent 5832465: Tom

-U. S. Patent 5607309: Finn

-U. S. Patent 5486001: Baker

-U. S. Patent 5318450: Carver

12. Claims 1-21 are rejected.

### Correspondence Information

13. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor David Vincent can be reached at (571) 272-3687. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Peter Coughlan

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